





Focusing on the obviousness of substitutions or differences is improper; rather, the claimed invention must be considered as a whole. *Gillette Co. v. S.C. Johnson & Son Inc.*, 919 F.2d 720, 724 (Fed. Cir. 1990). Moreover, it is impermissible simply to engage in a hindsight reconstruction of the claimed invention, using the patent as the template and selecting elements from references to fill the gaps. E.g., *In re Rouffet*, 149 F.3d 1350, 1358 (Fed. Cir. 1998), citing *In re Gorman*, 933 F.2d 982, 986 (Fed. Cir. 1991), citing in turn *Interconnect Planning Corp. v. Feil*, 774 F.2d 1132, 1143 (Fed. Cir. 1985).

Simply because claim features may be known in the art is insufficient for a finding of obviousness. “[A] patent composed of several elements is not proved obvious merely by demonstrating that each of its elements was, independently, known in the prior art.” *KSR Int’l v. Teleflex Inc.* 127 S. Ct. 1727, 1731 (2007). Rather, there must be a well reasoned or articulated rationale to combine the references or “something in the prior art as a whole to suggest the desirability, and thus the obviousness, of making the combination.” E.g., *Rouffet* 149 F.3d at 1356, and the cases cited therein. See also *In re Fulton*, 391 F.3d 1195, 1200 (Fed. Cir. 2004), citing *Rouffet; Sibia Neurosciences*, 225 F.3d at 1356; *ATD Corp. v. Lydall, Inc.*, 159 F.3d 534, 546 (Fed. Cir. 1998). As variously stated by the Federal Circuit, there must be some reason, teaching, suggestion, interference, motivation, or incentive in the prior art to make the selections made by the inventor and combine the prior art to produce the claimed invention. E.g., *Rouffet*, 149 F.3d at 1355; *Pro-Mold and Tool Co. v. Great Lakes Plastics Inc.*, 75 F.3d 1568, 1573 (Fed. Cir. 1996); *Gorman*, 933 F.2d at 986-987; and *Ashland Oil, Inc. v. Delta Resins & Refractories, Inc.*, 776 F.2d 281, 297 n.24 (Fed. Cir. 1985), *cert. denied*, 475 U.S. 1017 (1986). Further, a motivation to combine only flows from the combination that is, on balance, desirable, not merely feasible. See *In re Fulton*, 391 F.3d at 1200, citing *Winner Int’l Royalty Corp. v. Wang*, 202 F.3d 1340, 1349 (Fed. Cir. 2000). As explained by the *Winner Int’l Royalty Corp.* court, “[t]rade-offs often concern what is feasible not what is, on balance, desirable. Motivation to combine requires the latter.”

The United States Supreme Court, in *KSR Int’l*, 127 S. Ct. at 1740-41, cited with approval the Federal Circuit’s reasoning that “rejections on obviousness grounds cannot be

sustained by mere conclusory statements; instead, there must be some articulated reasoning with some rational underpinning to support the legal conclusion of obviousness.” *In re Kahn*, 441 F.3d 977, 988 (Fed. Cir. 2006). Accordingly, even if the references could somehow be interpreted to together teach all of the features of the claimed subject matter, the Office Action failed to provide a proper rationale as to why a skilled artisan would have combined Mueller with Menger to achieve the presently claimed subject matter.

The reasons set forth in the Office Action are insufficient to explain why a skilled artisan would have been motivated to combine the applied references in the asserted matter. The Office Action asserts that one having ordinary skill in the art would have been motivated to combine the two references because the catalyst used in Mueller would be deactivated or partially deactivated in the process. However, nowhere does Mueller suggest that the catalyst could or should become deactivated or would need to be disposed of. Quite to the contrary, Mueller teaches, at col. 3, lines 19-22, that the hydrogenation takes place under unexpectedly mild conditions with the amount of hydrogen consumed being immeasurably small. A person having ordinary skill in the art would not conclude from this disclosure that the catalyst in Mueller would become deactivated over time, but rather that the catalyst lasts longer than was previously known because it can be used under unexpectedly mild conditions.

Moreover, the Office Action asserts, at page 4, lines 11-12, that “Menger teaches the purification of polytetramethylene ether glycol in the presence of a hydrogen [sic] catalyst.” This assertion is incorrect. Menger teaches working-up of polymerization catalysts, specifically, as set forth at page 2, lines 29-30. Menger teaches that the polymerization catalysts are sheet silicates, in particular acid-activated montmorillonite. Menger neither teaches purification of polytetramethylene ether glycol nor hydrogenation catalysts.

In view of the above, each of the presently pending claims in this application is believed to be in the immediate condition for allowance. Accordingly, the Examiner is respectfully requested to withdraw the outstanding rejection of the claims and to pass this application to issue.

